Direct Loan eServicing High Level Design Phase 1 Deliverables Software Release 1.0 Section 3.0 – Appendix



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# Direct Loan eServicing High Level Design Phase 1 Deliverables Software Release 1.0 Section 3.0 – Appendix

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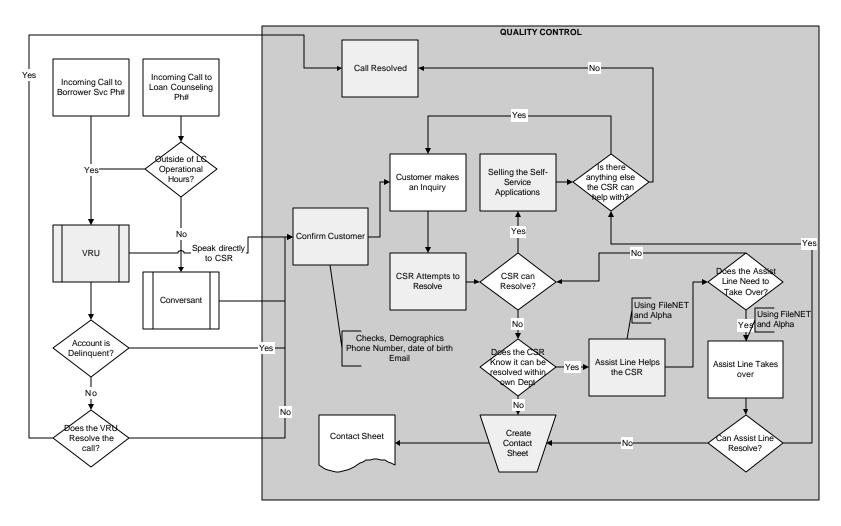
- 3 APPENDIX
- 3.1 ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT (ECRM)

### 3.1.1 eCRM Process Flows

### **3.1.1.1 Inbound Call**

CSRs in Borrower Services and Loan Counseling will handle inbound calls from customers. The flow diagram below represents the process a CSR would follow in answering a customer's request.

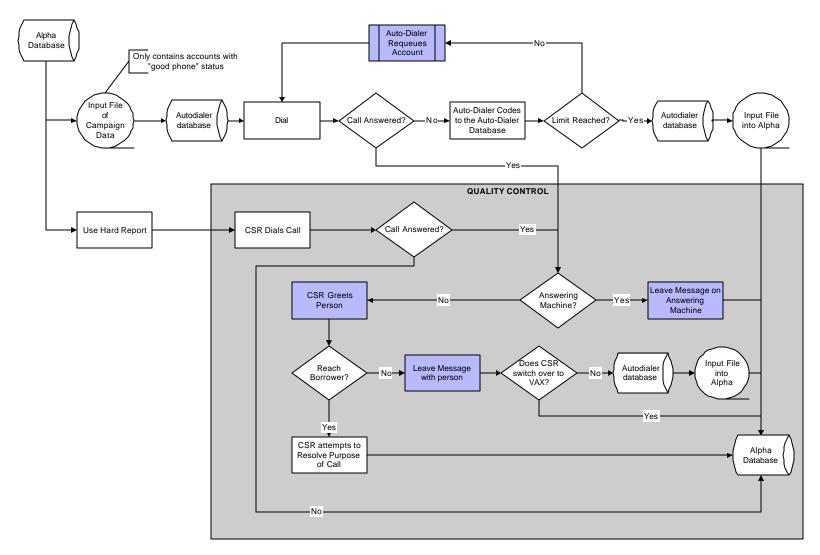
High Level Flow: Inbound Call



### 3.1.1.2 Loan Counseling – Outbound Call

CSRs in Loan Counseling make outbound calls to delinquent borrowers. The flow diagram below represents the process a CSR would follow in making a call to a borrower.

High Level Flow: Loan Counseling - Outbound



### 3.1.2 eCRM Screen and Views Description

### 3.1.2.1 Screen Categories

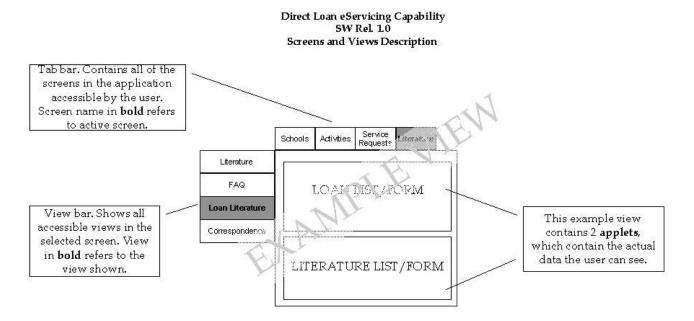
In the following diagram, the gray shaded boxes contain the eCRM screen categories, while the views that are a part of each screen are listed below it. For example, the view "All Borrowers" would fall under the "Borrowers" screen. During the detailed design stage, the various views, as well as the applets that make up the views, will be defined.

Tabs refer to all of the screen categories in the application accessible by the user. A screen (e.g., "Schools") is simply a collection of views.

	Tabs (Screens)					
	Borrowers	Accounts	Schools	Service Requests	Activities	Literature
V	All Borrowers	All Accounts	All Schools	All Service Requests	All Activities	All Literature
I E W	Borrower Summary	Loans & Disbursements	Contacts	Activities	Attachments	FAQ
S	Borrower Summary w/	Disbursements				Loan Literature
	Service Requests	Borrowers				Correspondence
	Activities	Contacts				
	Annual Activity	Payoff				
				Views are cate		

### **3.1.2.2 eCRM View**

The following diagram depicts an example view within the eCRM system.



### 3.1.3 eCRM Technical Architecture

### 3.1.3.1 Data and Interfaces

#### **Data Sources**

The eCRM system must provide CSRs with access to borrower demographic information, financial data (packets, loans, and disbursements), borrower transactional and contact history, and information regarding service requests and activities. Some of this data, specifically service requests and activities will be maintained by the eCRM system, but much of this information will be maintained by other systems internal to Direct Loan Servicing. The eCRM application will continue to meet the audit and "Freedom of Information" requirements currently in place.

Other sources of data for the eCRM application are the FileNET Imaging System, the Direct Loan Servicing System, the Voice Response Unit (VRU), and the AutoDialer. Details regarding each of these systems follow:

### **FileNET**

A FileNET system is used to store images of forms, correspondence, and other documents needed by Direct Loan Servicing. The CSR will continue to have access to images stored in the FileNET system.

### **Direct Loan Servicing System (DLSS)**

The DLSS will continue to be the system of record for all demographic and financial data used by the eCRM system. The eCRM system will interface with the DLSS using a number of real time and batch methods. Integration will ensure the same data is available to the users of both the eCRM application and the DLSS.

### **Voice Response Unit (VRU)**

The VRU captures the inbound caller's Social Security Number and provides automated access to the caller's account information. If the inbound call is transferred to a CSR, the information captured by the VRU must cause the eCRM system to display relevant information about the caller to the CSR.

### **AutoDialer**

The AutoDialer automatically places telephone calls to borrowers based on call queues generated by the Direct Loan Servicing Center. Once a call is successfully connected, it is automatically transferred to an available CSR. The AutoDialer must provide information about the call to the CSR through the eCRM system.

### eBPP/OC System

An eBPP and an On-Line Correspondence system, planned for implementation during the 2001 Summer, will be used to maintain borrower bill payment and store images of forms, correspondence, and other documents sent electronically to the borrower. The CSR will have access to data and images stored in the eBPP/OC system.

### 3.1.3.2 Inventory of Required Data

The following table contains an inventory of the major data entities expected to be used in the eCRM system. The table contains the following columns:

Data Entity – The entity represented in the particular row.

Source System – The system of record for the given data item.

Source Platform – The hardware/software platform of the source system.

Frequency – Expected frequency of update for the given data item.

Interface Type – Preliminary recommendation for the type of interface.

Comments – Comments on the given data item.

<b>Data Entity</b>	Source System	Source Platform	Frequency	Interface Type	Comments
Contact Demographic Data	DLSS	Alpha VMS (Oracle RDB)	Daily and On Request	Real-Time and Batch	Contact demographic data in the eCRM database will be refreshed from the DLSS daily using a combination of batch process and real-time processes.  Updates to DLSS contact demographic data from the eCRM system will be applied
Packet Data	DLSS	Alpha VMS (Oracle RDB)	Daily and On Request	Real-Time and Batch	real-time.  Packet data will be maintained in the DLSS and accessed by the eCRM system using real-time and batch interfaces.
Loan Data	DLSS	Alpha VMS (Oracle RDB)	Daily and On Request	Real-Time and Batch	Loan data will be maintained in the DLSS and accessed by the eCRM system using real-time and batch interfaces.
Disbursement Data	DLSS	Alpha VMS (Oracle RDB)	Daily and On Request	Real-Time and Batch	Disbursement data will be maintained in the DLSS and accessed by the eCRM system using real-time and batch interfaces.

Data Entity	Source System	Source Platform	Frequency	Interface Type	Comments
Transaction History	DLSS	Alpha VMS (Oracle RDB)	On Request	Real-Time	Transaction history will be maintained in the DLSS and be accessed by the eCRM system real-time.
Contact History	DLSS	Alpha VMS (Oracle RDB)	On Request	Real-Time	Contact history will be maintained in the DLSS and be accessed by the eCRM system real-time.
Service Requests	Siebel	Siebel Database (Oracle 8.1.6)	On Request	Real-Time	Service Requests are maintained exclusively by the eCRM system.
Activities	Siebel	Siebel Database (Oracle 8.1.6)	On Request	Real-Time	Activities are maintained exclusively by the eCRM system.
Attachments	Siebel	Siebel File Server	On Request	Real-Time	Attachments are maintained exclusive by the eCRM system.
Autodialer	DLSS	Alpha VMS (Oracle RDB)	Daily and On Request	Batch	Autodialer created by the DLSS and utilized by Siebel.

### 3.1.3.3 Execution Architecture

### Overview

An execution architecture is comprised of run-time services and control structures coupled with an application infrastructure. In the case of the eCRM capability, the execution architecture will consist of the Siebel application, the client hardware and software, the server hardware and software, the physical data network, and access to the DLSS. Below is an overview of the execution environment for the following components:

- (1) The existing DLSS Character based system using DEC Terminals/Terminal controllers to access the Alpha Servers.
- (2) The existing DLSS Windows based Graphical User Interface Client using ACMS data transport to access the Alpha Servers
- (3) Recommended eServicing execution architecture.

### 3.1.3.4 As-Is Execution Architecture Diagram DEC Terminals

The following diagram depicts the existing character based system utilizing the DEC Terminals/Terminal Controllers to access the Alpha Servers which host the DLSS. In the diagram, all application processing is performed on the Alpha Servers with the DEC Terminals used for presentation and data input capabilities.

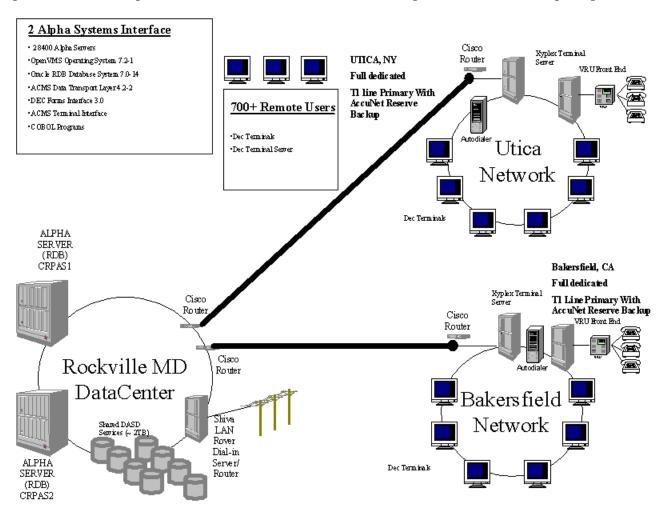


Figure 1 -- As-Is Execution Architecture (DEC ALPHA)

### 3.1.3.5 As-Is Execution Architecture DEC Alphas: Client, Server, Network

#### CLIENT

The clients in this diagram are character based terminals with limited processing capability. The terminals are used only as input / output devices to programs running on the Alpha servers. These terminals are controlled via a DEC terminal controller that acts as a gateway between the Utica and Bakersfield DLSC and the DLSS Alpha servers .

### **NETWORK T1 ACCESS**

The Terminal Servers at the Utica and Bakersfield DLSC are connected via 1.54 Mbps T1 lines to the Alpha Servers in the Rockville Data Center. These T1 lines are augmented by an alternate provider that provides full T1 backup circuits. This backup connectivity can be operational within 15 minutes of an outage.

#### ROCKVILLE NETWORK

The DLSS Alpha Servers (which host the DLSS Application) reside on the Rockville Data Center Network.

### **SERVERS**

The DLSS legacy application is hosted on dual Alpha 8400 servers with a clustered server array for fail over processing. The online portion of the DLSS application, which serves the DEC terminal clients, is available from 7am EST until 10pm EST and is tuned for online operations during this timeframe.

### **DIAL-IN INFRASTRUCTURE**

Remote access is available to connect to DLSS via dial-in lines through a multi-port dial-in server (Shiva). However, remote access is for production support and development activities only and plays no role in the application access for CSRs.

### 3.1.3.6 As-Is Execution Architecture Diagram DLSS GUI

The following diagram depicts an existing pilot system, which uses a Windows based GUI Client to access the DLSS running on the Alpha servers. The GUI client has a number of enhancements resulting in increased functionality over the DEC terminal clients. The enhancements include an embedded interface to the FileNET imaging system, more logical groupings of data, and local data caches. Additionally, the GUI client performs some processing tasks that were formally executed on the Alpha servers, provides more of a workflow-based application, and is easier to use.

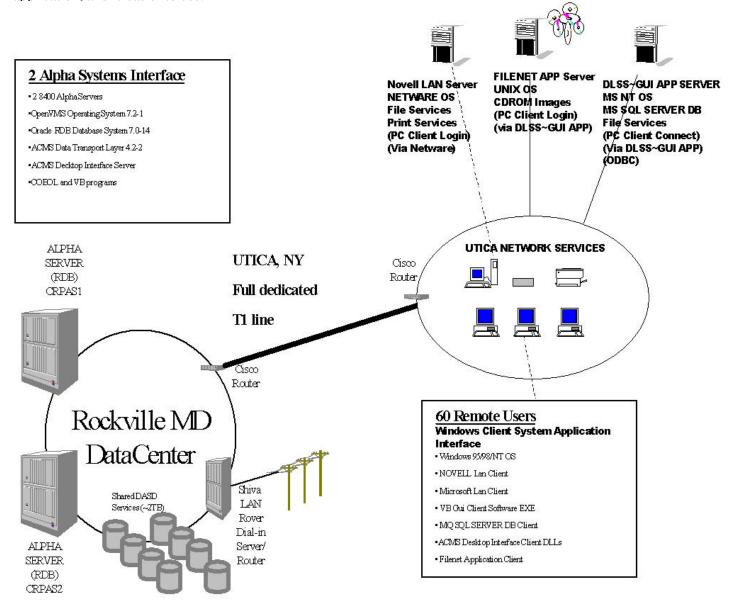


Figure 2 -- As-Is Execution Architecture (DLSS GUI)

### 3.1.3.7 As-is Execution Architecture DLSS GUI: Client, Server, Network

### **CLIENT**

The GUI client runs on a Microsoft Windows (version 95,98, or NT 4.0) personal computer. The PC has a custom developed Visual Basic 6.0 program that acts as the presentation layer for the DLSS. The client also accesses data stored in a local SQL Server database. Access to the DLSS is performed through an ACMS Desktop Client Interface which communicates with a matching ACMS Desktop Gateway Interface running on the DLSS Alpha Servers. This interface is a structured 64K workspace that utilizes the ACMS Data Transport Middleware supplied as a part of the VMS Operating System. This interface is scalable and capable of handling many users accessing the DLSS. In addition to the DLSS, the FileNET Imaging/Workflow Management Client is installed to provide true workflow activities from the imaging queues.

#### NETWORK T1 ACCESS

The pilot users at the Utica servicing center are connected via a full T1 line (1.54 Mbps) to the DLSS Alpha Servers in the Rockville data center. These T1 lines are augmented by an alternate provider that provides full T1 backup circuits. This backup connectivity can be operational within 15 minutes of an outage.

#### ROCKVILLE NETWORK

The DLSS Alpha Servers (which host the DLSS Legacy Application) reside on the Rockville Data Center network.

### **SERVERS**

The DLSS application is hosted on dual Alpha 8400 servers with a clustered server array for fail over processing. The online portion of the DLSS application (which interfaces with the GUI clients) is available from 7am EST till 10pm EST and is tuned for online operations during this timeframe.

### **DIAL-IN INFRASTRUCTURE**

Remote access is available to connect to DLSS via dial-in lines through a multi-port dial-in server (Shiva). However, remote access is for production support and development activities only and plays no role in the application access for CSRs.

### 3.1.3.8 Recommended Execution Architecture

The recommended eCRM system execution architecture is based on an analysis of the eCRM requirements and the user analysis and high level capacity planning estimates described below.

#### **User Analysis**

The eCRM capability user base is divided into three classes:

- The CSRs located at the call centers.
- The production support, development and test personnel located in Reston, VA, Rockville, MD and Long Beach, CA.
- Other Department of Education personnel.

All of the eCRM production servers are located at Rockville, MD Data Center. All users of the eCRM system will access these servers over the existing network.

#### **User Profile**

Category	Connected Users
Total Users	1,500
Concurrent Users at Peak Load	1,000

### **High Level Capacity Estimate**

During high level design, the eCRM team gathered data to be used as a starting point for a full capacity plan and to estimate the class of servers required by the eCRM system. The high level capacity estimate involved analyzing the data entities that must be stored in the eCRM system database, and the existing data volumes in the DLSS. This initial analysis and comparison with other engagements with similar data volumes indicates that Siebel database will be roughly between 80 GB to 140 GB in size, with additional space required for indices.

## 3.1.3.9 Recommended Execution Architecture Diagram

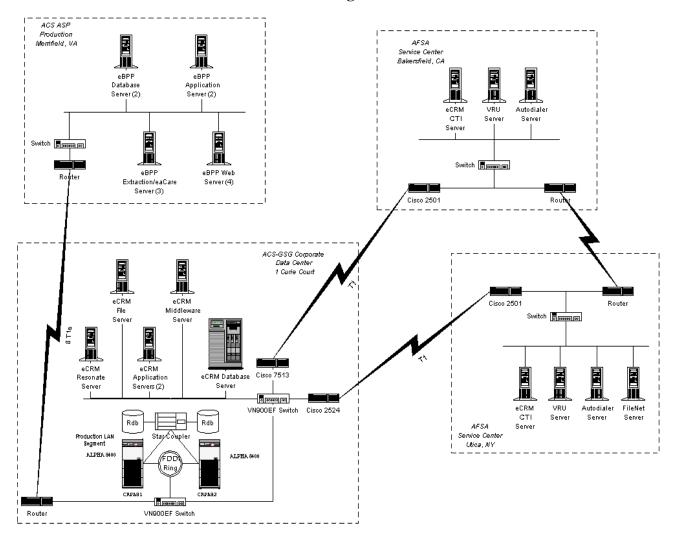


Figure 3 -- eServicing Execution LAN / WAN Configuration

## 3.1.3.10 Recommended eServicing Execution Architecture: Client, Server, Network

The following recommendations are based on the initial analysis and previous Accenture project experience.

### **Client Configuration**

The Siebel connected client is the client supported by the eCRM initial release. Connected clients communicate directly with the Siebel database server over the network and perform SQL operations online.

The minimum recommended configuration for desktop users is as follows:

Processor	500 Mhz or faster Intel-compatible processor.
O/S	Windows 2000 or Windows NT 4.0 SP4 or greater.
RAM	384 MB
Disk Space	750 MB
Screen Resolution	1024x768
Software Packages	<ul> <li>Microsoft Access ODBC driver</li> <li>Text ODBC driver</li> <li>MDAC 2.1x</li> <li>Oracle Net8 Client</li> <li>Adobe Acrobat Reader</li> <li>Microsoft Office Suite</li> </ul>

### 3.1.3.11 Server Configuration

### **Siebel Application Servers**

The Siebel application servers are responsible for supporting the real-time and batch interfaces to the eCRM system, inbound call routing to the appropriate CSR, workflow processing, and task assignment. A minimum of two Siebel application servers in a dynamic load balancing configuration are required to meet the eCRM system's availability requirements. A dual application server configuration will also provide adequate support for the number of current users and projected growth. The table below describes the minimum server configuration.

Operating System	Window NT Server 4.0 Enterprise Edition Service Pack 6A
Hardware Platform	Support for 4 – 8 Processors (SMPs)
RAM	1024 MB
Disk Space	150 MB for Siebel Enterprise Server software is the minimum. 2 x 9.1 GB Drives (RAID 1) are recommended.
RAID	RAID 1 or RAID 0+1 (striped and mirrored) disk configuration.
<b>Database Client</b>	Oracle Net8 Client version 8.1.6

### **Siebel Database Server**

The Siebel connected clients access the Siebel database server directly via ODBC. All data in the eCRM system is stored on the Siebel database server with the exception of financial data stored in the DLSS database. Siebel supports many database platforms, but Oracle 8.1.6 running on HP-UX is the database platform of choice due to SFA standards, performance and scalability reasons. The minimum database server requirements are listed below:

HP9000 database server meeting the following minimum requirements:

Operating System	HP-UX 10.10 or greater
Hardware Platform	Support for 4 – 8 Processors (SMPs)
Disk Space	10 x 36 GB Hard Disk (RAID 0+1) is recommended
RAID	Separate raid arrays on dedicated channels for paging file, database logs, and data files (at RAID 0+1).
Other Software	<ul> <li>HP ServiceGuard OPS Edition</li> <li>Oracle Parallel Server</li> <li>Oracle 8i Enterprise Server</li> <li>(8.1.6).</li> </ul>

#### Network

All Siebel dedicated clients operate directly against the server database, and require a LAN or WAN connection to the Siebel Database Server and the Siebel File System. Additionally, Siebel Clients in the eCRM system must have WAN connectivity to the DLSS and to the FileNet system. Any Siebel dedicated clients requiring interactive components on the Siebel Application Server (i.e. Siebel Server Manager or Siebel Assignment Manager) require TCP/IP connectivity to the Siebel Application Server as well.

All Siebel Application Server machines require a high speed LAN connection to the Siebel Database Server. This connection must be at least 100 Mbps and can be implemented with Fast Ethernet, FDDI, or other high-bandwidth LAN connection.

### **Load Balancing Server**

A load balancing server will be used to dynamically manage the workload of the Siebel application servers. The load balancing server serves two purposes, improve system performance by allocating tasks to the server with the most available processor time and maintain system availability by dynamically reassigning clients in the event of application server failure.

Two Windows NT servers with, at a minimum, the following configuration:

<b>Operating System</b>	Windows NT Server 4.0 SP6A
Processor	Dual 700 Mhz Xeon
RAM	512 MB minimum. 1028 MB recommended SDRAM
Disk Space	2 x 9.1GB Drives (RAID 1) recommended
Load Balancing Software	Resonate Central Dispatch 2.2b

### **Computer Telephony Integration (CTI) Middleware**

A CTI middleware component is needed to integrate the Siebel application with the Lucent (Avaya) Definity G3 switch and the VRU system. Currently two CTI middleware systems are being evaluated, Genesys T-Server and Avaya CenterVu Computer Telephony Server.

### Siebel File System

The Siebel File System stores files and attachments related to records in the Siebel database. Examples of these files are product literature and Word, Excel or PowerPoint files associated with a contact or account. The Siebel File System is implemented as a network shared folder.

## **Integration Middleware**

The eCRM system must integrate with a number of other DLSS components. A MQSeries middleware component has been selected for integration.

### **3.1.3.12** Operations Architecture

#### Overview

The operations architecture is the combination of tools, support services, procedures, and controls required to keep a production system up and running. It differs from an execution architecture in that its primary users are system administrators and production support personnel. Recommendations for operations architecture components such as help desk user support, system monitoring, security, and software distribution follow:

### **Operations Architecture Recommendations**

### Help Desk

The ACS GSG centralized help-desk support will be modified to support eCRM users. Central support will allow common problems and trends to be tracked across different locations, business environments, and different systems. It will also allow knowledge to be easily shared so that solutions discovered in one area do not have to be learned all over again in another. A window of operations supporting both call centers will be developed. The eCRM deployment will augment current Help Desk operations. Current Help Desk operations will not be reengineered.

### **System Monitoring**

The eServicing servers and network will be monitored closely, with automated, centrally administered toolsets. This will help provide knowledge for maximum performance tuning, and allow for early detection of possible system issues. As with help desk software, system-monitoring software will be chosen for its open standards or easy inter-operability.

System monitoring tasks will be handled by members of the DLSS production control staff. Database monitoring, maintenance, and administration is done by the Database Administrator (DBA). The ongoing maintenance of the Siebel processes and supporting data is the responsibility of the Siebel System Administrator.

#### Security

Security will also be managed centrally. Data security in the Siebel application is maintained by the RDBMS. Application level security is controlled by Siebel administrators using responsibility groups.

#### **Backup and Recovery**

A database backup procedure must be developed. The existing DLSS disaster recovery plan must be modified to include the eCRM system.

### **Software Distribution**

A mechanism will be developed for initial and future software distribution and maintenance rollouts.

### 3.1.4 eCRM Assumptions

### 3.1.4.1 Spanish Requirements

**Description** – Current Spanish functionality will remain the same. A Spanish speaking CSR will continue to use the English front-end and communicate to the borrower in Spanish. Only 2% of all incoming calls are Spanish; due to this small percentage, no enhancements will be made.

### **3.1.4.2 PIN** Mailing

**Description** – The eCRM team is assuming that the borrower's PIN cannot be emailed to the borrower for security reasons. A borrower's PIN must be mailed via postal mail to the borrower.

### **3.1.4.3** Forms and Correspondence

**Description** – All applications, forms and correspondence housed in electronic format can be used for this eCRM implementation.

### 3.1.4.4 Storing Email Addresses

**Description** – The borrowers' email addresses will be stored and maintained on the DLSS backend.

### 3.1.4.5 Bulletin and Policy Updates

**Description** – The eCRM team is assuming that changes to bulletins and policies approved by the Department of Education can be distributed to CSRs outside of a scheduled software release.

#### 3.1.4.6 The DLSS Database

**Description** – The DLSS database will continue to be the primary source of data and the database of record for Direct Loan Servicing.

### 3.1.4.7 Packet Driven Data

**Description** – The data in the DLSS database will continue to be packet-driven as so many other systems are reliant on the data being housed this way.

#### 3.1.4.8 Transactions to the DLSS Database

**Description** – Transactions will continue to be sent to the DLSS Database from the eCRM system for further processing when necessary.

### 3.1.4.9 Elements in the DLSS Database

**Description** – The eCRM system will have access to all data elements that reside in the DLSS database.

#### 3.1.4.10 Customer Validation and Security

**Description** – Customers must provide correct SSN, date of birth, and zip code to gain access or update borrower-specific information. If the borrower would like to perform actions that require a higher level of security (self-certifying forbearance, application for EDA, application for Electronic Bill Payment, etc.), the borrower must enter in their PIN.

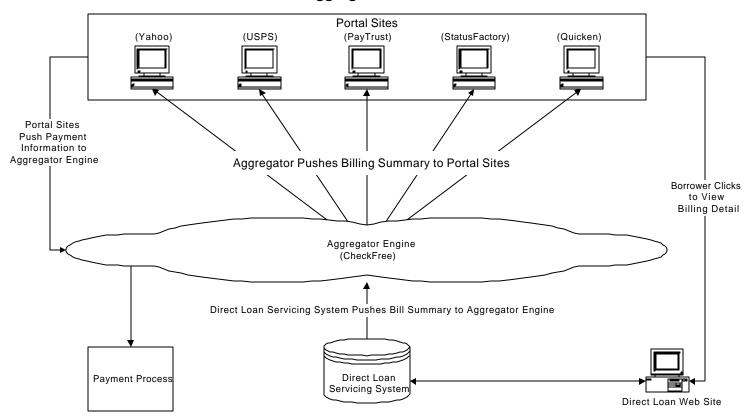
### 3.2 ELECTRONIC BILL PRESENTMENT & PAYMENT (EBPP) AND ONLINE CORRESPONDENCE (OC)

### 3.2.1 EBPP/OC Process Flows

## 3.2.1.1 Aggregator Model

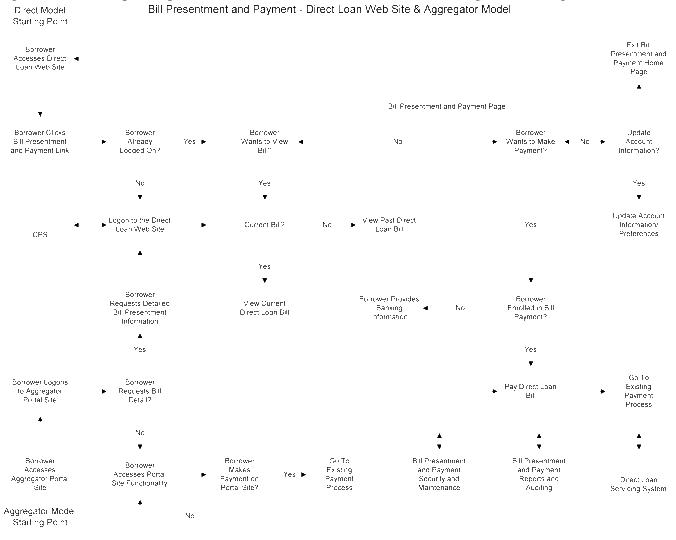
The following process flow details the flow of information for the electronic Bill Presentment and Payment capability for the Aggregator Model. Examples of the Aggregator Engine and Portal Sites are shown in parenthesis.

### **Aggregator Model**



### 3.2.1.2 Future Bill Presentment and Payment

The following process flow details the proposed eServicing Bill Presentment and Payment process for the Direct Model and Aggregator Model. The precise process flow will be finalized with the vendor during detailed design.



### **3.2.1.3** Future Correspondence Creation

The following process flow details the future correspondence creation process for postal mail and email. The postal mail correspondence creation process is current functionality without changes.

**Future Correspondence Creation** 

#### Handles the IPDS (Intelligent Printer Additional Batch Processing Data Streams) AFPDS/IPDS Processing and of Direct Loan Queues and Capable Printers AFP Resources Printers Borrower Contacts Virtual Data Multi T1 Lines - NJE Channel Connection Local Data Cente Local Printing of Call Center and Alpha Legacy Center - IBM Daily Notices IBM Mainframe **CSR Creates** System Mainframe MVS/ MVS/S390 Transaction S390 (A3) (A1) DecNet FTP over Data Transfer Facility Printing of Large Daily Batch 2 Fulfillment ostal Mail o Volume Notices Process Reviews Centers - IBM Account for Mainframe MVS/ and Bills Trigger Events (A4) S390 (A6) (B1) Borrower Receive Borrower Online Notice of Accessed Printing of Large Correspondence Correspondence Correspondence Volume Notices Server and Follows the on the Direct Loa and Bills Link Web Site (B2) Yes (B4) Borrowei **Email Created ar** Borrower Receive Sensitive Info Sent to Borrowe Email SFA Approved Borrower Sensitive Information

Postal Mail Fulfillment

A1. When the Alpha is completed processing Batch Jobs for postal mail correspondence, the files generated for notice are transferred over the DTF line to the IBM.

A2. The IBM takes the file and initiates the job specified in the parameter from the file transfer. Additional processing is done to prepare the file for print and add additional data items (postal processing and miscellaneous items). Output associated mailing instructions into the queue. Outputs the datafile to the queue specifying Advanced Function Printing (AFP) pagedef and formdefs as well as forms, if applicable.

A3. Daily output is pushed across an NJE connection to a print queue on our local IBM S390. A4. Bills, Quarterlies are FTPed in a fixed length, flat records to the larger fulfillment centers. A5. This computer also houses a complete set of the AFP libraries, which are called when it is initiated at the printer.

A6. These fulfillment centers have a copy of our AFP libraries, which are used when they print the notices on the IPDS (Intelligent Printer Data Stream) printer.

#### Email Print Fulfillment

B1. When the Alpha is completed processing Batch Jobs for email correspondence, the files generated for notice are transferred to the Online Correspondence Server. All correspondence specified for email and all bills ready for presentment will be forwarded to the Direct Loan Web Site (DLWS).

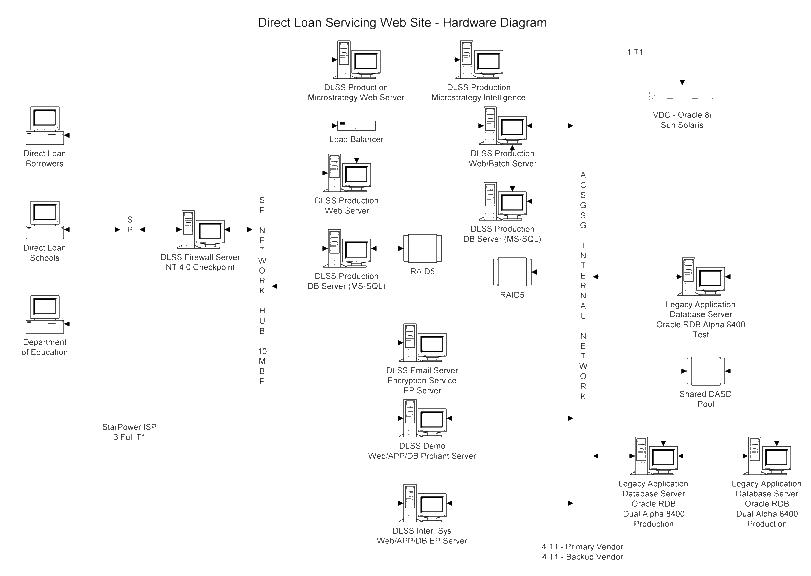
B2. The Online Correspondence Server parses the print stream file. The system then accesses the appropriate correspondence, creates the appropriate link to the Direct Loan web site (if needed), and forwards the email to the borrower.

B3. When the borrower clicks the link, the borrower is directed to the PIN process on the Direct Loan web site. When the borrower has confirmed their identity, the system displays the borrower's correspondence. The HTML page displaying the correspondence will be dynamically created after the borrower confirms their identity.

B4. When no borrower specific information is present in the email, the email will contain the text

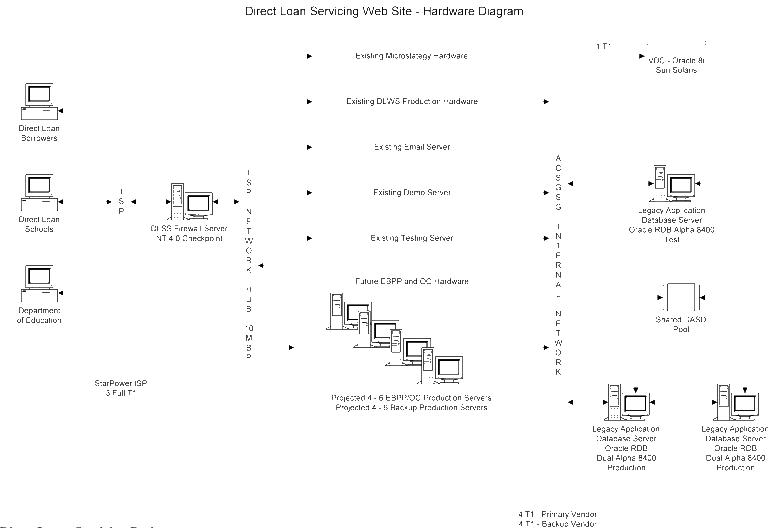
### 3.2.1.4 Existing Direct Loan Web Site – Hardware Diagram

The following process flow is the existing hardware diagram for the Direct Loan web site.



### 3.2.1.5 Future Direct Loan Web Site – Hardware Diagram

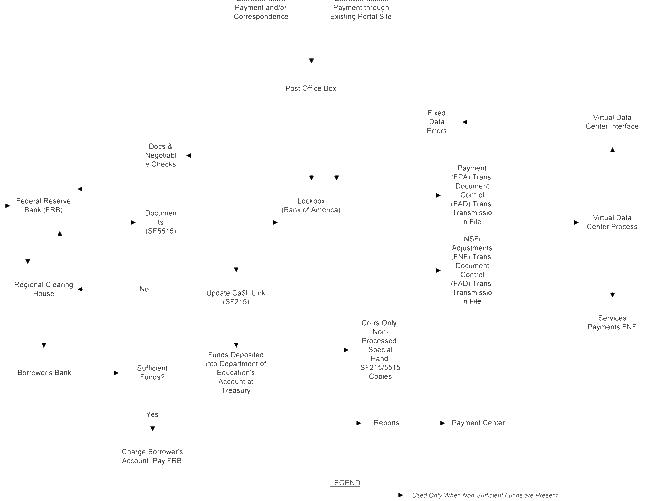
The following process flow details the projected hardware diagram for the EBPP and OC systems. The final hardware diagram will be determined during the detailed design phase based upon discussions with the Department of Education, eServicing team, and the vendor.



### 3.2.1.6 Existing Lockbox Procedure – Detail

The following process details the existing lockbox process. The existing lockbox procedure has been included because the eServicing team is investigating the existing lockbox procedures to implement the EBPP requirements.



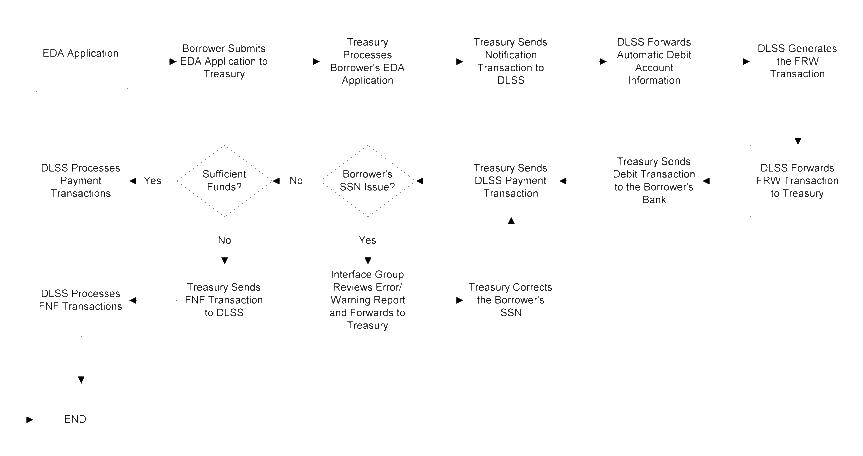


### 3.2.1.7 Existing EDA Procedure – Detail

The following process details the existing EDA procedure. The existing payment process procedure has been included because the eServicing team is investigating the existing payment processing procedure to implement the EBPP requirements.

EDA Procedure

Changes to Automatic Debit Information Shared Between Treasury and the DLSS



### 3.2.1.8 Future Payment Procedure – Detail

The payment process for the electronic Bill Present and Payment functionality will be finalized during detailed design. The eServicing team is investigating utilizing the existing Bank of America lockbox with electronic payment capability or the existing Department of Treasury debit procedure. The eServicing team is also researching the capabilities of the EBPP vendor provided payment processing.

### 3.2.2 EBPP/OC Assumptions

### 3.2.2.1 Spanish Requirements

**Description** – . The Direct Loan web site allows the borrower to view the site in Spanish or English. Under the eBPP/OC requirements, correspondence will be presented to borrowers via the Direct Loan web site. Therefore, the correspondence will be available to the borrower in Spanish or English on the Direct Loan web site.

The impact of the Spanish requirements to the creation and management of paper correspondence must also be analyzed. The paper creation process is not within the scope of the eServicing project.

### 3.2.2.2 Method of Payment

**Description** – Under current functionality, a borrower can submit payment for their Direct Student loans by mailing a check from a bank account or enrolling in the Electronic Debit Account (EDA) service. The eServicing team has designed the system to allow the borrower to submit their payment by ACH only.

If credit cards and/or debit cards are approved methods of repayment, the eServicing requirements will need to be expanded to detail the functionality. The Method of Payment functionality will impact the Electronic Bill Presentment and Payment (EBPP) and Electronic Customer Relationship Management (eCRM) capabilities.

### 3.2.2.3 Privacy Requirements

**Description** – Security and privacy functionality must be maintained at all times for borrower information. In order to maintain security around borrower's information as defined in the Privacy Act of 1974 (as amended) and the correspondence Department of Education regulations, the eServicing team is designing the EBPP and OC capabilities with the ability to send hyperlinks to borrowers that will direct the borrowers through the existing PIN process on the Direct Loan web site. Once the borrower clicks the link, the Direct Loan Web Site will validate the borrower's identity under current functionality. Once the borrower's identity has been established, the borrower will be automatically directed to the correspondence.

### 3.2.2.4 Direct Loan Servicing System & Direct Loan Web Site Development

**Description** – Based upon the eServicing implementation, changes will be required to the Direct Loan Servicing System (DLSS) and Direct Loan web site (DLWS). The eServicing team will coordinate with the DLSS and DLWS teams to define and schedule the required changes to the systems. It is the direction of the eServicing team to utilize current DLSS and DLWS functionality and limit the changes to the DLSS and DLWS whenever possible.

### 3.2.2.5 Aggregator Model – Independent Portal Sites

**Description** – Today, borrowers can submit payment to the Direct Loan program from portal sites. When the borrower submits payment, the portal site creates a paper check to the Direct Loan program and mails the check to the lockbox. When the eServicing requirements are implemented, a relationship with an Aggregator engine will be created to exchange information and facilitate electronic payments. There are hundreds of portal sites existing today and not all of the portal sites are aligned with a single Aggregator engine.

Therefore, it is likely that some independent portal sites will continue to submit paper checks for the Direct Loan program. All requirements and design documentation for the Aggregator model refer to a Direct Loan aligned Aggregator engine.

The amount of borrower specific information made available to the borrower at the Aggregator engine will be determined by the Department of Education under security guidelines.

### **3.2.2.6** Ad Hoc Correspondence and Online Correspondence

**Description** – The Online Correspondence functionality will allow the Direct Loan program to communicate to borrowers through email. The functionality will contain and manage correspondence templates for all production correspondence. Ad hoc correspondence to borrowers will not be maintained through the Online Correspondence system. The existing functionality and processes for Ad Hoc correspondence (Executive Issues) will be continued.

### 3.2.2.7 Receiving Emails

**Description** – Under current functionality, the Direct Loan Servicing Center can receive emails from borrowers through the Direct Loan Web Site. The EBPP and OC functionalities do not change the ability to receive emails. A return email address to will be available in all email correspondence.